

What is Claimed is:

1. A pipe fitting having a body with an internal bore of a specific nominal diameter, the internal bore being threaded with internal bore threads, the internal bore threads having sides, crests and roots, the sides being disposed at a specific angle ϕ , the roots being recessed such that, when an externally threaded pipe having (i) the same nominal diameter as the bore of the pipe fitting body, and (ii) external threads with sides disposed at the same specific angle ϕ and with sharp crests is disposed within the bore of the pipe fitting body, the sharp crests of the external threads do not impinge upon the roots of the internal threads.

10 2. The pipe fitting of claim 1 wherein the roots each have a base which is rounded.

3. The pipe fitting of claim 1 wherein the roots each have a base which is generally flat.

15 4. The pipe fitting of claim 1 wherein, when an externally threaded pipe having (i) the same nominal diameter as the bore of the pipe fitting body, and (ii) external threads with sides disposed at the same specific angle ϕ and with sharp crests is disposed within the bore of the pipe fitting, a clearance is defined between each sharp crest of the externally threaded pipe and one of the roots of the pipe fitting which is less than about 0.03 inches in depth.